

**PHASE DIFFERENCE PLATE AND PRODUCTION THEREOF**

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**Abstract of JP3021902**

**PURPOSE:**To improve optical uniformity and to eliminate the optical unequalness appearing as if clouds by consisting the phase difference plate of a biaxially oriented film-like material of a propylene-alpha-olefin copolymer contg. alpha-olefin exclusive of propylene at 0.5 to 5.0wt.% as a copolymn. component and specifying the phase difference value by a polarization microscope to a specific range.  
**CONSTITUTION:**This phase difference plate consists of the biaxially oriented film-like material of the propylene-alpha-olefin copolymer cont. the alpha-olefin exclusive of the propylene at 0.5 to 5.0wt.% as the copolymn. component. The plate is so formed that the phase difference value by the polarization microscope is in the 50 to 900nm range and the difference between the max. value and min. value of the phase difference values at arbitrary  $\geq 2$  points on the film-like material is  $\leq 30$ nm. the unequalness like clouds generated by the fluctuation in the phase difference value is entirely eliminated in this way and the optical uniformity is obt'd. This phase difference plate is usable as a compensation plate for preventing the coloration of a liquid crystal display element or as a ray reflection preventive material for various display devices when a circular polarizing plate is formed by combining this plate with a polarizing plate.

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